

Title (en)
Lamp Failure detection system

Title (de)
Anordnung zur Erkennung einer fehlerhaften Lampe

Title (fr)
Système de détection d'une lampe défectueuse

Publication
EP 0448358 B1 19960508 (EN)

Application
EP 91302378 A 19910319

Priority
JP 7073990 A 19900320

Abstract (en)
[origin: EP0448358A2] A lamp failure detection system for detecting lamp failure in a lighting circuit having a plurality of lamps connected with the secondary side circuits of each of a plurality of current transformers, the current transformers having their primary side circuits connected in series to an alternating current power supply. The detection system includes a plurality of lamplight failure detectors (42 or 21) fitted one to each of the lamps for detecting a lamp failure, a power control unit (18) for performing repeatedly the momentary interruption of the output of the alternating power supply, a plurality of lamplight circuit control units (27) fitted one to each of the lamplight failure detectors for electrically closing the secondary side circuit of the current transformer when a lamp failure is detected by the lamplight failure detector and for opening the secondary circuit for a fixed time when the number of momentary interruptions of the alternating current power supply which occur after the lamp failure is detected reaches a predetermined number of momentary interruptions set for each lamp, a lamplight failure judgement unit (16) for detecting lamp failure based on variations in the outputs of alternating current power supply, and a lamplight failure locator unit (19) for deciding which of the lamps has failed based on the comparison between the number of momentary interruptions from the time when a first lamp failure is detected with the predetermined number of momentary interruptions set for each lamp. <IMAGE>

IPC 1-7
H05B 37/03

IPC 8 full level
B64F 1/20 (2006.01); **G01R 31/06** (2006.01); **H04Q 9/00** (2006.01); **H05B 37/03** (2006.01)

CPC (source: EP US)
H05B 47/235 (2020.01 - EP US)

Cited by
EP0758837A3; CN103076532A; CN102955094A; FR2851048A1; CN101765278A; DE19649371C1; FR2790444A1; CN113112834A; EP3171377A1; NL2015819B1; CN113096365A; WO9413119A1; WO9815840A3; WO0053495A1; WO2004079470A3; WO2006077478A3

Designated contracting state (EPC)
DE GB IT

DOCDB simple family (publication)
EP 0448358 A2 19910925; EP 0448358 A3 19921202; EP 0448358 B1 19960508; DE 69119281 D1 19960613; DE 69119281 T2 19970123; JP 2923324 B2 19990726; JP H03272595 A 19911204; US 5168198 A 19921201

DOCDB simple family (application)
EP 91302378 A 19910319; DE 69119281 T 19910319; JP 7073990 A 19900320; US 67078091 A 19910319